the number of varicosities before and after the tourniquet Trendelenberg test was recorded. All patients underwent EVA of the GSV under local anaesthetic without stab avulsions. At 6-weeks post-EVA, the number of residual varicosities were recorded and compared to the pre-operative findings.
Results: The mean number of varicosities observed pre-EVA was 5.7 (range 1-11) before and 1.5 (SD 1.4) after the Trendelenberg Test, versus 1.4 (SD 1.2) post-EVA. Mean difference between the pre-EVA and post-EVA groups was -0.2 (95% CI -0.7 - 0.4); p=0.55 (paired T-test). The Trendelenberg test showed a positive correlation in predicting the number of varicosities post-EVA (pearson coefficient: 0.64; p<0.001).
Conclusions: The tourniquet test is a valuable bedside tool in determining the outcome post-EVA and the need for stab avulsions.

0753: RUPTURED ABDOMINAL AORTIC ANEURYSMS: DECREASING INCIDENCE MAY AFFECT THE IMPACT OF SCREENING

Stephan Dreyer, Paul Burns. *Department of Vascular Surgery, Royal Infirmary of Edinburgh, Edinburgh, UK*

Background: Ruptured Abdominal Aortic Aneurysm (AAA) is a significant cause of death and recent evidence has shown that screening is beneficial in reducing mortality.
Aim: The aim of this study was to evaluate the number of ruptured AAAs, and the associated mortality, that presented to a tertiary vascular surgery unit each year.
Methods: A retrospective review of operative records from 1987-2009 was conducted.
Results: 888 Patients (Male 728, Female 158) were identified. The number of ruptures remained constant from 1987-2001, with a mean of 43.4 ruptures a year (95% CI 40.1-46.7). This decreased to a mean of 29.63 per annum (95% CI 24.3-34.6) in 2002-2009. The average mortality was 39.8% and showed no significant decrease; a mean of 41.1% (95% CI 38-44.2) in 1995-2001 and 38.6% (95% CI 33.4-43.8) during the period 2002-2009.
Conclusion: This data series showed patients that reach hospital have a significant mortality which has not decreased during the study period. This study further suggests that the incidence of ruptured AAAs is decreasing. These results suggest that AAA screening may not be as beneficial and cost effective as previous studies have shown.

0808: ENDOVENOUS RADIOFREQUENCY ABLATION IN OCTOGENARIANS – SAFE, EFFECTIVE AND RECOMMENDED

Victor Kung[1], Bynvant Sandhu[1], Andrew Choong[2], Alexander Loh[1]. [1] *Barnet General Hospital, Barnet, Hertfordshire, UK;* [2] *Northwick Park Hospital, Harrow, London, UK*

Aim: Varicose vein surgery aims to reduce venous ulcer recurrence and encourages healing to those resistant to compression therapy. However, it is often avoided in elderly populations due to multiple co-morbitidies. This often results in chronic ulceration and impaired quality of life.
We report our experience of varicose vein radiofrequency ablation (RFA) under local anaesthesia (LA) in an octogenarian population.
Method: All patients aged ≥80 undergoing endovenous RFA between 2009 and 2011 were identified from a prospective database. Patient demographics, co-morbidities, indications for surgery, mode of anaesthesia, complications and outcomes at follow-up were documented.
Results: 35 patients (Median age 84.5, M:F=1:1.33) had endovenous RFA, with an ASA grade 2 (57%, n=20) and 3 (43%, n=15). 12 patients had active ulcers and 7 had ulcers previously. The majority of operations (69%, n=24) were performed under LA (1 Spinal, 10 GA). There was no operative mortality or morbidity. All 12 ulcers were healed by the end of the follow-up period (Median 51 days. Range=8-220). Only 5 patients had oedema and 1 had residual varicosities post-treatment. No ulcer recurrence was identified.
Conclusions: Endovenous RFA under local anaesthesia is safe, effective and recommended in patients aged over 80 in units with suitable endovenous expertise.

0814: PEAK OXYGEN CONSUMPTION IS AN INDEPENDENT PREDICTOR OF MORTALITY FOLLOWING ABDOMINAL AORTIC ANEURYSM SURGERY

Andy Kordowicz[1], Jeremy Purdell-Lewis[1], David Watson[1], Anne Johnson[1], Julian Scott[1], Simon Howell[2]. [1] *Leeds Vascular Institute, The General Infirmary at Leeds, Leeds, West Yorkshire, UK;* [2] *Academic Department of Anaesthesia, The General Infirmary at Leeds, Leeds, West Yorkshire, UK*

Aims: We examined whether peak oxygen consumption (VO_2peak) was an independent predictor of long-term outcome after abdominal aortic aneurysm (AAA) repair.
Methods: Between 02/2007 and 09/2009, 115 patients (mean age 74.8years) underwent static echocardiography and cardiopulmonary exercise testing before AAA surgery. Lee scores were calculated for each patient. Mortality data were determined from our database; median follow-up was 932days. Using Cox-regression analysis the associations between VO_2peak, anaerobic threshold (AT) and all-cause mortality were examined.
Results: 59 open and 56 endovascular AAA repairs were performed. 30-day mortality was 3.5% and 12-month mortality was 11.3%. 25 patients had died by 05/2011 giving a long-term series mortality of 21.7%.
The unadjusted hazard ratio (HR) for all-cause mortality was 0.89(95% confidence intervals(CI)=0.82-0.97) for every ml/kg/min reduction of VO_2peak(p=0.009). This remained significant when adjusted for age , sex , Lee score and performance on static echocardiogram (HR 0.90(CI=0.82-0.99),p=0.033).
The association between AT and mortality was not statistically significant(HR 0.91(CI=0.80-1.04), p=0.187). The association between left ventricular function and mortality was not statistically significant (HR 2.1(CI=0.91-4.71),p= 0.080).
Conclusion: VO_2peak is an independent predictor of all-cause mortality following AAA repair. A dynamic exercise test to volitional exhaustion adds value in risk stratification prior to AAA surgery.

0828: PREVALENCE OF AAA IN NORTH CENTRAL LONDON – FIRST YEAR RESULTS

Bhavina Khatani, Jason Constantinou, Perbinder Grewal, Meryl Davis. *Royal Free Hospital, London, UK*

Aim: The National Health Service Abdominal Aorta Aneurysm Screening Programme (NAAASP) was announced in January 2008. North Central London was approved in the first phase of AAA screening implementation and commenced screening in September 2010.
Method: Men aged 65 years resident in North Central London were invited for aneurysm screening. Data collected from 01 December 2010 for 12 months are reported.
Results: 11785 men were invited, this included first and numerous recall invitations; 4496 (38%) attended while 1620 (13%) declined to be screened and 5082 (43%) did not attend.
Forty (0.9%) aneurysms were detected: with one man requiring surgery; this was performed endovascularly and is alive 4 months postoperatively.
Conclusion: In North Central London the prevalence of screened AAA (0.9%) is far lower than the rate in the MASS trial (4.9%). Possible reasons for this are the younger age screened as compared to those recruited to the MASS trial. The high DNA rates may hide the true prevalence of aneurysms. It is noted, however that nationally the prevalence of AAA remains low. Further work is needed to improve attendance rates for aneurysm screening in London and this may well provide a more accurate AAA prevalence rate.

0849: ENDOVENOUS LASER ABLATION FOR SMALL SAPHENOUS VARICOSE VEINS: EVALUATION OF OUTCOMES OVER TWO YEAR FOLLOW-UP

Nehemiah Samuel, Tom Wallace, Rachel Barnes, Risha Gohil, Ian Chetter. *Hull York Medical School / University of Hull, Hull, UK*

Aim: To evaluate the safety and efficacy of endovenous laser ablation(EVLA)as an alternative to conventional surgery for small saphenous vein(SSV) incompetence.
Methods: Patients with symptomatic, unilateral, primary saphenopopliteal junction(SPJ) incompetence with SSV reflux receiving EVLA(810 nm diode laser) treatment were included. Patients were assessed at baseline and at 1,6,12,52 & 104 weeks. Outcome measures included: Venous Clinical Severity Score(VCSS); Quality of life(generic-SF36, EQ5D and disease specific-AVVQ) measures; complications and recurrence rates.
Results: 62 patients(37 women), mean age 46.3(s.d. 13.3) years were assessed. Initial technical success was 100% in all limbs. SPJ incompetence was abolished in 83% & 89%; and treated SSV occluded in 83% & 84% at 1 and 2 years respectively. Clinical recurrence over same period was 11% with 4 limbs(6.4%) developing recanalisation [median(i.q.r.) laser density 94(90-103)J/cm]. Venous severity (CEAP and VCSS), AVVQ, SF36, EQ5D

significantly improved and was sustained over the 2 year($P<0.05$) follow-up. Temporary paraesthesia was found in 11% which completely resolved. No major complications occurred.

Conclusion: Early and mid-term results of EVLA for SSV incompetence demonstrated this treatment to be safe and effective. Clinical recurrence due to recanalisation may occur despite adequate magnitude of energy delivery; neoreflux in previously competent veins may contribute to this process.

0857: RETROSPECTIVE REVIEW OF PATIENTS TREATED WITH ENDOVASCULAR TECHNIQUES AT A SINGLE CENTRE

N. Foden [1], M. Davis [2], K. Tullus [1], C.A. McLaren [1], S. Marks [1], G. Hamilton [1], D. Roebuck [1]. [1] *Great Ormond Street Hospital, London, UK;* [2] *Royal Free Hampstead NHS Trust, London, UK*

Aim: Mid-aortic syndrome (MAS) is a cause of severe hypertension in children. It is essential to make an early diagnosis. We undertook a retrospective study to assess the benefit of endovascular techniques in the treatment of MAS and the importance of a multi-disciplinary team (MDT) approach.

Methods: A retrospective review of 22 patients treated by radiological intervention at Great Ormond Street Hospital.

Results: 49 procedures (mean 2.2 procedures: range 1-5) were undertaken on 22 patients (mean age 7.6 years: 14 boys (64%) and 8 girls (36%)). Complications were seen in four cases including one death due to haemorrhage following angioplasty, 2 pseudoaneuryms and one urethral trauma. Radiological intervention followed surgery in 23% (5/22) of cases. 9% were 'cured' (2/22), 60% 'improved' with fewer medications or symptoms, 27% had no change and 4% 'failed.'

Conclusion: Radiological intervention provides a viable treatment method for MAS, although it may not be definitive and is not without complications. Surgery is often used as a final intervention but can be used in conjunction with or prior to radiological techniques. An individualized and combined treatment plan for each patient by an MDT comprising radiological, surgical and medical specialties is essential to improve outcome in MAS patients.

0873: GSV DIAMETER IS NOT APPROPRIATE FOR DETERMINING PROVISION OF TREATMENT IN SUPERFICIAL VENOUS INSUFFICIENCY

Tom Wallace, Nehemiah Samuel, Daniel Carradice, Ian Chetter. *Acadademic Vascular Surgical Unit, Hull York Medical School, Hull Royal Infirmary, Hull, Yorkshire, UK*

Introduction: The National Institute for Health and Clinical Excellence (NICE) uses Quality of Life (QoL) to inform decisions on health resource provision; Superficial Venous Insufficiency (SVI) has a significant negative effect on QoL. Some medical insurance companies require a minimum GSV diameter before funding intervention for SVI.

The aim of this study was to assess the ability of GSV diameter to accurately predict clinical severity and QoL in patients with SVI.

Methods: A prospectively maintained database of patients with primary, symptomatic SVI was interrogated. Pre-procedural duplex ultrasound measurements of GSV diameter were correlated with clinical severity (CEAP and VCSS), generic and disease-specific QoL using Spearman's rho correlation coefficient.

Results: 493 patients (64% female, mean age 49 [S.D. 14] years) were assessed prior to planned intervention. There were weak but statistically significant correlations between increasing GSV diameter and CEAP ($r=.302$, $p<0.01$), VCSS ($r=.239$, $p<0.001$) and AVVQ ($r=.101$, $p<0.05$) but not with generic QoL.

Conclusions: There is a complex interplay between factors that affect QoL in SVI, with no obvious single surrogate marker. Detailed regression analyses may further elucidate these relationships. Provision of intervention in SVI should currently be based on patient symptoms and QoL in combination with detailed clinical and ultrasonographic assessment.

0885: A SYSTEMATIC REVIEW OF RANDOMISED CONTROLLED TRIALS EVALUATING ENDOVENOUS THERMAL ABLATIVE TECHNIQUES FOR VENOUS ULCER DISEASE

Nehemiah Samuel, Tom Wallace, Daniel Carradice, Rachel Barnes, Risha Gohil, Ian Chetter. *Hull York Medical School / University of Hull, Hull, UK*

Aims: To undertake a systematic review of RCTs to determine the effects of superficial venous endothermal ablation on the healing, recurrence rates and quality of life (QoL) of people with venous ulcer disease.

Methods: A systematic literature search from 1998-2011 was undertaken for prospective RCTs comparing endothermal ablative techniques versus compression therapy alone for venous ulcers treatment. All types of enodothermal techniques were included and no restrictions were placed on language or publication status.

Results: Electronic searches produced 198 references, of which only one RCT comparing endovenous laser ablation(EVLA) with compression therapy in the treatment of active venous ulcers(C6) was identified. Results from this study at 1 year showed a significantly higher proportion of ulcer healing(81.5% Vs. 24% $P=0.001$); reduction in mean ulcer size(22.2 to 2.7cm^2 Vs. 17.4 to 12.7cm^2 $P=0.003$) and ulcer recurrence(0 Vs 44.4% $P=0.047$) in the groups receiving combined EVLA and compression Vs compression therapy alone respectively.

Conclusions: The review revealed a paucity of evidence in this important new area of study. A single small study, albeit with unclear risk of bias and short term follow-up demonstrated outcomes in favour of endothermal ablative techniques in venous ulcers management. Adequately powered and methodologically sound trials are urgently required to draw firm conclusions.

0921: PREDICTING IMMEDIATE AND MID-TERM DISTAL VASCULAR BYPASS SURGERY OUTCOME USING PREOPERATIVE MAGNETIC RESONANCE ANGIOGRAPHY (MRA)-DERIVED RUTHERFORD'S RUNOFF CLASSIFICATION

Buket Ertansel, Abdullah Jibawi, Amour Patel, Michael Brooks. *Brighton and Sussex Uniuversity Hospitals, Brighton, UK*

Aims: to validate the use of preoperative MRA-derived Rutherford's runoff classification in predicting immediate and mid-term patency of distal vascular bypass

Methods: MRA and duplex scanning were performed prospectively on patients undergoing distal bypass surgery. Patient demographics, risk factors, type of surgery, type of graft used and surgical outcome were reviewed. Modified Rutherford score was calculated for each case as a marker for runoff resistance. Distal-femoral diastolic resistance (DFDR) ratio was calculated using the ratio of end-diastolic velocity (EDV) in the distal vs. femoral arteries. Predictors of graft patency were determined using Cox proportional hazards.

Results: Twenty three patients underwent fem-distal bypass surgery between 2008-2011, with mean age of 71, were identified. Most patients were male (68%), had hypertension (63%) and were current or ex-smokers (90%). The patency rate for all distal bypasses on hospital discharge, 4, and 12 weeks postoperatively was 81%, 72%, and 54% respectively. Immediate graft patency correlated well with MRA-derived Rutherford's runoff classification ($p=.06$) and DFDR ratio ($p=.001$). Mid-term patency was not significantly correlated with MRA-derived Rutherford's runoff classification ($p=.72$).

Conclusions: preoperative MRA-derived Rutherford's runoff classification and DFDR ratio are fairly accurate and reliable predictors of immediate graft patency

0925: WHAT IS THE OPTIMAL BYPASS GRAFT SURVEILLANCE PROGRAMME?

Sophie Wienand-Barnett, Catherine Western, David Birchley. *Royal Devon and Exeter Hospital, Exeter, UK*

Aims: To assess patterns of graft patency over time and establish whether current surveillance at 6/52, 3, 6 and 12 months is effective resource use.

Methods: Retrospective analysis of a prospectively maintained database.

Results: 81 patients entered graft surveillance between 2006 and 2011. Median age was 73 and male:female ratio was 4:1.

71 underwent vein grafting and 10 composite. Overall 11% occluded within 12/12 and a further 7% at >1 year (range 15-48 months). Graft stenosis requiring intervention e.g. angioplasty, occurred in 12% (all vein) within 12/12 and another 2% stenosed after a year. Lifetime amputation rate was 11%. When analysed according to operation, 64% underwent fem-pop bypass (88% 1 year patency, 12% stenosis), 21% fem-distal bypass (88% patency, 11% stenosis), 6% pop-distal bypass (80% patency, 20% stenosis) and 9% other bypass. The majority of fem-pop associated complications (50%) were identified at 6/12, with another 19% arising after surveillance completion. There was no pattern to stenosis/occlusion